

Amendments to the Specification:

Please replace the paragraph [0072] on page 18, with the following rewritten paragraph:

[0072] Although the invention has been described in terms of a UWB multi-band transmitter 102 (including an encoder 106, a mapper 108, and a modulator/pulse shaper 110) and a UWB multi-band receiver 104 (including a demodulator 112, demapper/processor 114, and a decoder 116) it is contemplated that the invention may be implemented in software on a computer (not shown), such as a general purpose computer, special purpose computer, digital signal processor, microprocessor, microcontroller, or essentially any device capable of processing digital signals. In this embodiment, one or more of the functions of the various components may be implemented in software that controls the computer. This software may be embodied in a computer readable carrier, for example, a magnetic or optical disk, a memory card or an audio frequency, radio frequency, or optical carrier wave. disk, an optical disk, a memory-card, or other tangible medium capable of carrying processing instructions.